



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,536	10/14/2005	Wolfgang Rohde	LU 6035 (US)	9276
34872	7590	12/12/2008		
Basell USA Inc. Delaware Corporate Center II 2 Righter Parkway, Suite #300 Wilmington, DE 19803			EXAMINER GOFF II, JOHN L	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 12/12/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/520,536

**Applicant(s)**

ROHDE ET AL.

**Examiner**

John L. Goff

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 22-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This action is in response to the amendment filed on 10/9/08.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

3. Claims 1-9, 12-19, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadr (U.S. Patent Application Publication 2002/0105115) in view of Schaftingen et al. (U.S. Patent Application Publication 2001/0015513) or the admitted prior art (Specification pages 3-4 and in particular DE 10042121 wherein U.S. Patent 6,893,603 is also applied as a translation).

Sadr discloses a process for producing hollow plastic articles such as a fuel tank comprising producing a tubular plastic parison by means of extrusion or coextrusion, cutting open the tubular plastic parison to produce two planar-surface parts, molding by thermoforming or blow molding the planar-surface parts in two mold halves to give half shells wherein a removable intermediate frame separates the mold halves from one another at least along peripheral edges wherein the planar-surface parts and half shells are not in contact with each other, opening the mold halves and removing the intermediate frame, and bonding by welding the half shells along a peripheral rim (Figures 1-10 and Paragraphs 0004, 0009, 0023, 0026, 0032, 0034, 0036, and 0037). Sadr does not specifically teach bonding by welding the half shells along a peripheral rim by closing the mold halves, it being noted Sadr does not specifically describe the bonding. Schaftingen discloses a process for producing hollow plastic articles such

as a fuel tank comprising producing a tubular plastic parison by means of extrusion or coextrusion, cutting open the tubular plastic parison to produce two planar-surface parts, molding by blow molding the planar-surface parts in two mold halves to give half shells and bonding by welding the half shells along a peripheral rim using closed mold halves (the Figure and Paragraphs 0019 and 0021). The admitted prior art discloses a process for producing hollow plastic articles such as a fuel tank comprising producing a tubular plastic parison by means of extrusion or coextrusion, cutting open the tubular plastic parison to produce two planar-surface parts, molding by thermoforming the planar-surface parts in two mold halves to give half shells, opening the mold halves, closing the mold halves wherein the half shells come into contact with one another along a peripheral rim, and bonding the half shells (Page 3, line 21-Page 4, line 10 of the Specification and Column 7, lines 4-64 of '603). It would have been obvious to one of ordinary skill in the art at the time the invention was made to bond the half shells as taught by Sadr by simply closing the mold halves as was the known simple technique as shown by Schaftingen or the admitted prior art.

Regarding claims 2 and 3, Sadr appears to teach that after removal of the intermediate frame that parts such as fuel lines, pumps, sensors, etc. are attached to the inside of at least one of the molded half shells (Paragraphs 0004 and 0006). In the event it is considered Sadr does not necessarily suggest incorporating these parts the following rejection would apply. Schaftingen (Paragraph 0032) and the admitted prior art (Column 7, lines 42-64 of '063) are evidence it was known to attach fuel tank parts such as those claimed to at least one of the molded half shells before bonding the half shells. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Sadr a step of attaching fuel tank parts to at least

one of the molded half shells after opening the mold halves and removal of the intermediate frame as such parts were known to be attached prior to bonding the half shells as shown by Schaftingen or the admitted prior art to form a functional fuel tank.

Regarding claims 6 and 13, the process taught by Sadr as modified by Schaftingen or the admitted prior art uses heat from molding to weld the half shells without additional heating or cooling steps.

Regarding claim 7, it is considered that the shaping of the bond line into a particular geometry by the closed mold halves such as specified by the admitted prior art (Column 7, lines 56-64 of '063) after initial bonding of the half shells is further molding by thermoforming.

Regarding claims 8 and 9, the intermediate frame taught by Sadr is of single-part or multipart design and comprises a plate insert which substantially provides complete filling of an area between the two mold halves wherein the frame comprises equipment for blowing air considered equipment for either cooling or heating (Figure 5).

Regarding claims 14, 19, and 23 Sadr does not teach including driven units of a floating roller type. However, it was known to include such for guiding the parison over the cutting device as shown by Schaftingen (the Figure and Paragraphs 0030 and 0046). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in Sadr driven units of a floating roller type for guiding the parison over the cutting device as shown by Schaftingen.

Regarding claim 15, Sadr cuts the tubular plastic parison before the extrusion process is complete.

Regarding claims 16-18 and 24-26, Sadr is not limited to any plastic parison and specifically suggest at least one or two polymeric layers one of which may be a barrier layer (Paragraph 0036). Schaftingen (Paragraphs 0014 and 0015) and the admitted prior art (Column 5, lines 10-67 of '063) are exemplary of extruding a parison for a fuel tank having the particular layers of claims 16-18 and 24-26 which tank has a leakproof nature and mechanical stability. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the parison taught by Sadr one formed of layers known to form a fuel tank having a leakproof nature and mechanical stability such as that shown by Schaftingen or the admitted prior art.

4. Claims 9, 10, 11, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadr and Schaftingen or the admitted prior art as applied to claims 1-9, 12-19, and 23-26 above, and further in view of Shuman (U.S. Patent 4,170,449).

Sadr and Schaftingen or the admitted prior art as applied above teach all of the limitations in claims 9, 10, 11, and 22 except for a specific teaching that the intermediate frame includes equipment for controlled heating of the edges of the molded half shells and the pinch-off edge of the half molds, it being noted the intermediate frame taught by Sadr clamps the edge of the planar-surface parts to the pinch-off edge of the half molds during thermoforming. It is well taken in the art of thermoforming of a planar-surface part using a frame that the frame includes equipment for controlled heating of the frame to prevent edges of the planar-surface part which are clamped from cooling and distorting during thermoforming as shown by Shuman (Column 1, lines 19-64 and Column 2, lines 16-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the intermediate frame taught by Sadr as

modified by Schaftingen or the admitted prior art equipment for controlled heating of the frame as is well taken in the art as shown by Shuman to prevent edges of the planar-surface part from distorting during thermoforming.

***Terminal Disclaimer***

5. The terminal disclaimer filed on 10/9/08 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent 6,893,603 has been reviewed and is NOT accepted.

The person who signed the terminal disclaimer is not recognized as an officer of the assignee, and he/she has not been established as being authorized to act on behalf of the assignee. See MPEP § 324.

An attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

It would be acceptable for a person, other than a recognized officer, to sign a terminal disclaimer, provided the record for the application includes a statement that the person is empowered to sign terminal disclaimers and/or act on behalf of the organization.

Accordingly, a new terminal disclaimer which includes the above empowerment statement will be considered to be signed by an appropriate official of the assignee. A separately filed paper referencing the previously filed terminal disclaimer and containing a proper empowerment statement would also be acceptable.

***Double Patenting***

6. Claims 1-9, 12, 13, 15-18, 24, and 25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,893,603 in view of Sadr. Claims 1-18 of U.S. Patent No. 6,893,603 fully encompass claims 1-9, 12, 13, 15-18, and 24-26 of the instant application except for a specific teaching of thermoforming using mold halves and an intermediate frame of which an obvious known suitable thermoforming technique for a similar/same product is disclosed by Sadr more fully described above.
7. Claims 10, 11, and 22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,893,603 and Sadr as applied above, and further in view of Shuman. Claims 1-18 of U.S. Patent No. 6,893,603 and Sadr fully encompass claims 10, 11, and 22 of the instant application except for a specific teaching that the intermediate frame includes equipment for controlled heating of the edges of the molded half shells and the pinch-off edge of the half molds which is obvious in view of Shuman as set forth above.
8. Claims 19, 23, and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,893,603 and Sadr as applied above, and further in view of Schaftingen. Claims 1-18 of U.S. Patent No. 6,893,603 and Sadr fully encompass claims 19, 23, and 26 of the instant application except for a specific teaching of including driven units of a floating roller type which is obvious in view of Schaftingen as set forth above.



***Response to Arguments***

9. Applicant's arguments filed 10/9/08 have been fully considered but they are not persuasive.

Applicants argue, "Unlike Applicants' invention, Sadr does not teach an integrated process which comprises the use of a removable intermediate frame. In Applicants' invention, the removable intermediate frame not only serves to separate the tubular plastic parison into two planar surface parts and keep the two semi-finished half shells from contacting each other, but more importantly, it can also be removed after the two half shells are formed so that the incorporated parts such as fuel lines, valves, cups and sensors can be easily installed on the half shells. Without the removable intermediate frame, the half shells must be taken out of the mold halves to install the incorporated parts."

Sadr teaches a removable intermediate frame (16 of Figure 1) wherein the frame can be removed after the two half shells are formed so that the incorporated parts can be easily installed on the half shells. Sadr does not specifically describe if the incorporated parts are installed with or without the half shells in the mold halves. However, the claims are not commensurate in scope with that argument as the claims do not require the incorporated parts installed with the half shells in the mold halves.

Applicants further argue, "Furthermore, unlike the prior art processes of Sadr and Schaftingen et al., the process of the invention integrates the bolding of the two half shells into a continued operation. That is, after the removal of the intermediate frame and the installation of the incorporated parts, the two mold halves are closed and the two finished half shells are then bonded. This integrated process of the invention operates more efficiently and

produces more reliable products than either Sadr, or Schaftingen et al., or the combined teachings of Sadr and Schaftingen et al. Both Sadr and Schaftingen et al. operate the bonding of two finished half shells separately from producing the semi-finished half shells and installing the incorporated parts onto the half shells.”.

Neither Sadr nor Schaftingen require finishing the half shells separately from producing the semi-finished half shells and installing the incorporated parts into the half shells. The process of producing the half shells, installing the incorporated parts into the half shells, and finishing the half shells is a continued operation in Sadr as modified by Schaftingen or the admitted prior art in as much as applicants invention is a continued operation.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571)272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John L. Goff/  
Primary Examiner, Art Unit 1791